

EG&G ER Program
Rocky Flats Plant

(02/08/90)

ER PROGRAM DATA ASSESSMENT SUMMARY REPORT FORM

Batch No. 8908S036 Site Area 2 - 881 Hillside
Laboratory Roy F. Weston-Stockton No. of Samples/Matrix 6/Water
SOW # 7/87 Reviewer Org. TechLaw, Inc.
Sample Numbers SW070005 (total), SW070005D (total), SW070005FB (total), SW070005 (soluble),
SW070005D (soluble), SW070005FB (soluble)

Data Assessment Summary

	ICP	AA	Hg	CN	Comments
1. Holding Times	<u>V</u>	<u>V</u>	<u>V</u>	<u>V</u>	
2. Calibrations	<u>A</u>	<u>V</u>	<u>V</u>	<u>V</u>	Action Items 1-8
3. Blanks	<u>A</u>	<u>A</u>	<u>V</u>	<u>V</u>	Action Items 9-19
4. ICP Interference Check Sample	<u>V</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	
5. Lab Control Sample Results	<u>V</u>	<u>V</u>	<u>V</u>	<u>V</u>	
6. Duplicate Sample Results	<u>V</u>	<u>V</u>	<u>V</u>	<u>V</u>	
7. Matrix Spike Sample Results	<u>V</u>	<u>A</u>	<u>V</u>	<u>V</u>	Action Items 20-22
8. Method of Standard Addition	<u>V</u>	<u>V</u>	<u>N/A</u>	<u>N/A</u>	
9. Serial Dilution	<u>V</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	
10. Sample Verification	<u>V</u>	<u>V</u>	<u>V</u>	<u>V</u>	
11. Other QC	<u>V</u>	<u>V</u>	<u>V</u>	<u>V</u>	
12. Overall Assessment	<u>A</u>	<u>A</u>	<u>V</u>	<u>V</u>	Data valid, or acceptable with qualifications

V = Data had no problems.

A = Data acceptable but qualified due to problems.

R = Data rejected.

X = Problems, but do not affect data.

N/A = Not applicable.

Data Quality: Data contained in this batch were reviewed and found to be valid, or acceptable with qualifications. Acceptable,
qualified data may be used provided that individual values impacted by the "Action Items" listed below are appropriately flagged.
(Refer to attached Results Summary Tables).

ADMIN RECORD

"REVIEWED FOR CLASSIFICATION 1

By R. B. Hoffman

Date 7-11-90

REVIEWED FOR CLASSIFICATION/UCNI

By George H. SeelockDate 6/27/90

8s036/eg03j

A-OU01-000069

Action Items: 1) All non-detect Lithium aqueous values are estimated and undetected (UJ) because CRDL %Recovery criteria was not met.

2) All non-detect Molybdenum aqueous values are estimated and undetected (UJ) because CRDL %Recovery criteria was not met.

3) All non-detect Tin aqueous values are estimated and undetected (UJ) because CRDL %Recovery criteria was not met.

4) All non-detect Strontium aqueous values are estimated and undetected (UJ) because CRDL %Recovery criteria was not met.

5) All non-detect Cadmium aqueous values are estimated and undetected (UJ) because CRDL %Recovery criteria was not met.

6) All non-detect Cobalt aqueous values are estimated and undetected (UJ) because CRDL %Recovery criteria was not met.

7) All non-detect Silver aqueous values except SW070005FB (total) are estimated and undetected (UJ) because CRDL %Recovery criteria was not met.

8) The Selenium aqueous values for SW070005 (total and soluble) and SW070005FB (total) are rejected (R) because negative bias was indicated in the blanks.

9) The Selenium aqueous value for SW070005D (total) is estimated and undetected (UJ) because Selenium values >IDL were found in the blanks.

10) All Antimony aqueous values are rejected (R) because negative bias was indicated in the blanks.

11) The Copper and Potassium aqueous values for SW070005 (total and soluble) and SW070005D (total and soluble) are estimated and undetected (UJ) because analyte values >IDL were found in the blanks.

12) The Sodium aqueous values for SW070005FB (total and soluble) are estimated and undetected (UJ) because Sodium values >IDL were found in the blanks.

13) The Chromium aqueous values for SW070005FB (total) and SW070005D (soluble) are rejected (R) because negative bias was indicated in the blanks.

14) The Chromium aqueous values for SW070005D (total) and SW070005FB (soluble) are estimated and undetected (UJ) because Chromium values >IDL were found in the blanks.

Action Items: (cont) 15) The Iron aqueous values for SW070005 (soluble), SW070005D (soluble), and SW070005FB (total and soluble) are estimated and undetected (UJ) because Iron values >IDL were found in the blanks.

16) The Silver aqueous value for SW070005FB (total) is estimated and undetected (UJ) because Silver values >IDL were found in the blanks.

17) The Zinc aqueous values for SW070005 (soluble), SW070005D (soluble), and SW070005FB (total and soluble) are estimated and undetected (UJ) because Zinc values >IDL were found in the blanks.

18) The Zinc aqueous values for SW070005 (total) and SW070005D (total) are estimated (J) because negative bias was indicated in the blanks.


19) The Thallium value for SW070005D (soluble) is estimated and undetected (UJ) because the post-digestion matrix spike %Recovery criteria were not met.

20) The non-detect Selenium aqueous values for SW070005D (soluble) and SW070005FB (soluble) are estimated and undetected (UJ) because the post-digestion matrix spike %Recovery criteria were not met.

21) The non-detect Lead aqueous values for SW070005 (total) and SW070005D (soluble) are estimated and undetected (UJ) because the post-digestion matrix spike %Recovery criteria were not met.

Comments: None

Note: Data Summary Tables are attached.


Reviewer Signature

2/12/90
Date

SITE NAME: Area 2 - 881 Hillside

CLP WATER INORGANIC ANALYSIS: Low Water

ANALYTICAL RESULTS (ug/L)

Sample Location		SW070005		SW070005		SW070005D		SW070005D		SW070005FB		SW070005FB	
Sample Number		8/14/89		8/14/89		8/14/89		8/14/89		8/14/89		8/14/89	
Sample Date		Total		Soluble		Total		Soluble		Total		Soluble	
Remarks													
Inorganic Analyte	DL ug/L	DQ		DQ		DQ		DQ		DQ		DQ	
Aluminum	Al 200	411	V	71.4 U	V	357	V	70.8	V	71.4 U	V	42.3	V
Antimony	Sb 60	12.7 U	R	12.7 U	R	12.7 U	R	12.7 U	R	12.7 U	R	12.7 U	R
Arsenic	As 10	1.2 U	R	1.2 U	V	1.2 U	R	1.2 U	V	1.2 U	R	1.2 U	V
Barium	Ba 200	104	V	85.0	V	95.0	V	96.5	V	4.9 U	V	4.9 U	V
Beryllium	Be 5	0.8 U	V	0.8 U	V	0.8 U	V	0.8 U	V	0.8 U	V	0.8 U	V
Cadmium	Cd 5	2.1 UJ	A	2.1 UJ	A	2.1 UJ	A	2.1 UJ	A	2.1 UJ	A	2.1 UJ	A
Calcium	Ca 5000	54700	V	59300	V	55700	V	59200	V	36.0 U	V	36.0 U	V
Cesium	Cs 1000	1000 U	V	1000 U	V	1000 U	V	1000 U	V	1000 U	V	1000 U	V
Chromium	Cr 10	3.9 U	V	3.9 U	V	14.4 UJ	A	3.9 U	R	3.9 U	R	6.9 UJ	A
Cobalt	Co 50	4.9 UJ	A	4.9 UJ	A	4.9 UJ	A	4.9 UJ	A	4.9 UJ	A	4.9 UJ	A
Copper	Cu 25	7.8 UJ	A	7.3 UJ	A	6.1 UJ	A	7.0 UJ	A	5.8 U	V	5.8 U	V
Iron	Fe 100	573	V	22.2 UJ	A	630	V	28.1 UJ	A	86.5 UJ	A	74.2 UJ	A
Lead	Pb 5	1.1 UJ	A	1.1 U	V	1.1 U	V	1.1 UJ	A	1.1 U	V	1.1 U	V
Lithium	Li 100	100 UJ	A	100 UJ	A	100 UJ	A	100 UJ	A	100 UJ	A	100 UJ	A
Magnesium	Mg 5000	13200	V	13300	V	13000	V	13200	V	53.9 U	V	53.9 U	V
Manganese	Mn 15	87.0	V	82.6	V	78.2	V	78.5	V	1.7 U	V	1.7 U	V
Mercury	Hg 0.2	0.20 U	V	0.20 U	V	0.20 U	V	0.20 U	V	0.20 U	V	0.20 U	V
Molybdenum	Mo 200	100 UJ	A	100 UJ	A	100 UJ	A	100 UJ	A	100 UJ	A	100 UJ	A
Nickel	Ni 40	8.4 U	V	8.4 U	V	8.4 U	V	8.4 U	V	8.4 U	V	8.4 U	V
Potassium	K 5000	1920 UJ	A	1350 UJ	A	2270 UJ	A	1890 UJ	A	758.7 U	V	758.7 U	V
Selenium	Se 5	0.80 U	R	0.80 U	R	0.90 UJ	A	0.80 UJ	A	0.80 U	R	0.80 UJ	A
Silver	Ag 10	3.4 UJ	A	3.4 UJ	A	3.4 UJ	A	3.4 UJ	A	6.5 UJ	A	3.4 UJ	A
Sodium	Na 5000	24400	V	22500	V	24600	V	22400	V	38.5 UJ	A	38.2 UJ	A
Strontium	Sr 200	1000 UJ	A	1000 UJ	A	1000 UJ	A	1000 UJ	A	1000 UJ	A	1000 UJ	A
Thallium	Tl 10	2.8 U	V	2.8 U	V	2.8 U	V	2.8 UJ	A	2.8 U	V	2.8 U	V
Tin	Sn 200	100 UJ	A	100 UJ	A	100 UJ	A	100 UJ	A	100 UJ	A	100 UJ	A
Vanadium	V 50	6.0 U	V	6.0 U	V	6.0 U	V	6.0 U	V	6.0 U	V	6.0 U	V
Zinc	Zn 20	81.3 J	A	6.1 UJ	A	28.8 J	A	4.2 UJ	A	11.3 UJ	A	6.6 UJ	A
Cyanide		10.0 U	V	N/R		10.0 U	V	N/R		10.0 U	V	N/R	

E Estimated by the Laboratory

U Indicates the compound was not detected above the Instrument Quantitation Limit

J Quantitation is approximate due to limitations identified during the quality control review

DL Detection Limit in Micrograms per Liter (ug/L)

N/R Not reported

DQ Data Qualifier

V Valid

A Acceptable with qualifications

R Rejected

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